21

Melanosarcoma of the Conjunctiva, with the Report of a Case.

OPHTHALMIC HOSPITAL

Presented in the Section on Ophthalmology at the Forty-eighth Annual Meeting of the American Medical Association, held at Philadelphia, Pa., June 1–4, 1897.

BY ALBERT RUFUS BAKER, M.D.

PROFESSOR OF DISEASES OF THE EYE, EAR AND THROAT, CLEVELAND COLLEGE OF PHYSICIANS AND SURGEONS; OCULIST AND AURIST TO THE CLEVELAND GENERAL, ST. ALEXIS AND CITY HOSPITALS.
CLEVELAND, OHIO.

REPRINTED FROM
THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION
JANUARY 15, 1898.

CHICAGO:
AMERICAN MEDICAL ASSOCIATION PRESS.
1898.

Melanosarcoma of the Conjunctiva, with the Report of a Case.

Presented in the Section on Ophthalmology at the Forty-eighth Annual Meeting of the American Medical Association, held at Philadelphia, Pa., June 1–4, 1897.

BY ALBERT RUFUS BAKER, M.D.

PROFESSOR OF DISEASES OF THE EYE, EAR AND THROAT, CLEVELAND COLLEGE OF PHYSICIANS AND SURGEONS; OCULIST AND AURIST TO THE CLEVELAND GENERAL, ST. ALEXIS AND CITY HOSPITALS.

CLEVELAND, OHIO.

REPRINTED FROM
THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION
JANUARY 15, 1898.

CHICAGO:
AMERICAN MEDICAL ASSOCIATION PRESS.
1898.

16/3911

MELANOSARCOMA OF THE CONJUNCTIVA, WITH THE REPORT OF A CASE.

Mr. G. of Cambridge Springs, Pa., aged 69 years, was first seen in March, 1888, with a dark purplish lobulated tumor of the left eyeball, about three quarters of an inch in length, one-half inch in breadth and about one-half inch in thickness, springing from the ocular conjunctiva on the nasal side. The tumor was first noticed about one year previously as a small dark spot. There was no history of traumatism.

There was diplopia when looking to the right, owing to the tumor preventing the eye rotating in that direction. There was slight haziness of the lower part of the cornea, probably due to the imperfect closure of the lids, but otherwise vision was good. A fairly satisfactory ophthalmoscopic examination was possible, revealing a healthy fundus. The tumor was slightly movable, but I was uncertain whether or no it was adherent to sclerotic or deep orbital structures. There was no pain and the patient refused to have the tumor removed.

During the next three months the tumor grew rapidly and began to fungate and bleed frequently. During the early part of June there were two or three hemorrhages, which were controlled with great difficulty by compress bandages. It was only after becoming thoroughly alarmed by these hemorrhages that the patient consented to have the tumor removed, which at this time presented an ugly, black mass, filling the palpebral opening and completely covering the eyeball.

Ether was administered and every precaution taken to control excessive hemorrhage, and preparations were made for extensive dissections of the orbit together with the sacrifice of the eyeball. Indeed, a formidable operation was anticipated, but much to our surprise, the tumor was found to be pedunculated, very superficially attached to the conjunctiva, and removed easily with the forceps and scissors with very slight hemorrhage, leaving a perfectly clean wound of the conjunctiva which was partially closed with sutures. The wound healed kindly but was followed by a slight entropium, owing to the cicatricial contraction. This was relieved by an operation one year later. The patient was seen three years after the operation, vision perfect in both eyes, no recurrence of tumor and general health excellent.

The tumor removed was the shape and almost the size of a hen's egg, hard and black, round and smooth, excepting on the larger fungating end. Dr. Chr. Sihler, professor of histology in the medical department of the Western Reserve University, examined the tumor microscopically and pronounced it a small celled melanosarcoma with much pigment.

Mr. Gerrish died September, 1893, five years and three months after the tumor was removed from his eye. An autopsy was held by Dr. W. N. Young, together with the assistance of several physicians of Cambridge Springs, Pa. Death was due to a large cancerous growth of the liver, probably melanosarcoma.

It seems as though there should be no difficulty in distinguishing these conjunctival tumors from intraocular ones which, having penetrated the sclerotic, present externally. Unlike some of our mistakes, this may prove disastrous to our patient. Few would object to the removal of the tumor if assured that the eyeball need not be sacrificed. I fell into this error and only recognized my mistake during the operation. In the light of my present experience the error seems almost inexcusable.

Several cases of non-pigmented sarcoma of the con-

junctiva have been reported, but they are probably much less frequent than the pigmented tumors. The sclerocorneal limbus seems to be a not very infrequent location for epithelial cancers. They are usually non-pigmented, sessile, flat tumors of slow growth with an early tendency to ulcerate.

The melanotic sarcoma of the conjunctiva, like the epithelial cancer, is peculiar to old people, although a few have been reported in young persons. Carcinomatous growths of the conjunctiva have been recorded by a number of writers, and may or may not be pigmented. Indeed, the statement of "Noyes[1] that the occurrence of pigmentation is a feature entirely incidental and not essential to the growth of the tumor seems probable." Although melanotic tumors of the conjunctiva are comparatively rare, I am inclined to think they are more common than the literature of the subject would lead us to infer.

Walton[2] states that in three cases in which he removed the eyeball for a chronic fungus state of the conjunctiva, he found upon dissection the coats and other parts of the eye to be quite unaffected and in their natural state.

Travers[3] gives a beautiful illustration of a case in which he performed abscission of the anterior portion of the eyeball.

Dr. Jacob[4] reports a case of a black, spongy tumor, two inches in diameter, overlapping the eyelids in all directions so as to nearly close the whole opening of the orbit. It appeared to be attached to the eyeball with a cylindric stalk which was slightly enclosed by the eyelids. Being prepared to remove the contents of the orbit, if necessary, Dr. Jacob drew his knife across the stalk as a preliminary operation, and found that he had incised a healthy eyeball, the disease being confined to the conjunctiva. The divided eyeball healed kindly. The subsequent history of the case is not recorded.[5] Cases have been reported in more recent literature in which the eyeball has been unnecessarily sacrificed.

These melanotic tumors of the conjunctiva seem to present an exception to the general surgical principle in malignant growths, that the dissection should be made as distant from the tumor as possible. It is not impossible that these cases may occasionally result in spontaneous cure.

Some time since, Dr. A. P. Ohlmacher[6] presented to the Cleveland Medical Society two specimens taken postmortem from a man who had had trouble with his eye four years before the liver trouble, from which he died, began. The duration of the liver trouble was about one year. The relation of the enlarged liver to the eye disease was suspected by the physician in charge of the patient, but it was thought to be echinococcus disease, and an operation was undertaken to remove the suspected hydatids. The interior of the eye was occupied by a small black tumor which showed, on microscopic examination, all the characteristics of melanotic sarcoma. A curious feature, says Dr. Ohlmacher, of this growth is its tendency to atrophy and shrink with the eyeball instead of increasing in size and breaking through the eye, as is usually the case. A line of pigment along one side of the optic nerve probably marks the route by which the tumor germs escaped from the eye to produce the metastatic infection. The liver with the metastatic, melanotic sarcoma weighs fifteen pounds.

Dr. Mathewson reported a case somewhat similar in the "Transactions of the Amer. Ophthal. Society" in 1874. Dr. Mathewson's case subsequently died, melanotic tumors appearing over the entire surface of the body, as well as in the internal organs.

Dr. Randall[7] observed a case in Jaeger's clinic, a large pedunculated tumor, apparently tending toward spontaneous recovery.

In my case the pedicle was so small, in comparison with the size of the tumor, that it might have been possible for the entire growth to have dropped off from its own weight, and the pressure of the lids upon the pedicle behind it. At least a slight twist so as to

cut off the circulation might have accomplished this result, yet these tumors may grow to an immense size.

Mr. Abernathy[8] refers to a curious case of a sarcomatous tumor of the conjunctiva which did not involve the cornea, which was clear and transparent. The tumor pushed out between the eyelids and was seven inches long, three and one-half in circumference, and weighed when extricated two and one-half pounds. More information as to the subsequent history of these cases would be of great interest. This might be a good subject for collective investigation.

There seems to be great indefiniteness as to how frequently and how soon recurrence of melanosarcoma of the conjunctiva may occur, and in what proportion metastasis may be expected after removal. De Wecker[9] intimates that we should be extremely cautious about operating on these tumors. He says cases have remained absolutely stationary for twelve or even twenty years, while if operated on they sometimes recur with fearful rapidity, or what is perhaps worse, undergo metastasis. If convinced that general infection is not immediately imminent, he advises enucleation of the eye at once; but no such operation should be ventured on if previous attempts have already produced a return of the disease *in situ*, or if the blood is contaminated. In that case metastasis will happen almost to a certainty.

As an illustration of the difference of opinion held by members of the profession as to the question of metastasis, Strause[10] offers as one of his conclusions: "Metastasis practically never occurs." The latter conclusion does not seem to be warranted by the history of these cases as recorded by many observers.

Fuchs[11] reports a case of typical melanosarcoma that was first excised in 1879. In May, 1886, it returned on the opposite side of the cornea of the same eye. It was again removed and returned. In September of the same year the eye was enucleated, and six months later it returned in the bottom of the orbit. Complete exenteration of the orbit was then performed.

The patient died from extension of growth to internal organs in February, 1890.

Cases dying from metastasis have also been reported by Ole Bull[12] and others.

REFERENCES.

1 Noyes: Archives of Ophthal., vol. viii, p. 145.
2 Walton: Practical Treatise on Dis. of Eye, 3d Ed., 1875, pp. 140 to 149.
3 Travers: Synopsis of Dis. of the Eye, 3d Ed., 1824, Fig. 2, Plate 2, p. 102.
4 Dublin Medical Press, Nov. 30, 1842.
5 Archives of Ophthal., vol. xviii, p. 163.
6 Ohlmacher: Cleveland Jour. of Med., March, 1897, p. 141.
7 Trans. Amer. Ophthal. Society, 1886.
8 London Reports, 1811, Surg. Observ. on Tumors, etc., p. 43.
9 Ocular Therapeutics, p. 101.
10 Archives of Ophthal., April, 1897.
11 Fuchs: Text-book on Ophthal., 1895, p. 119.
12 Archives of Ophthal., vol. xviii, p. 168.